

Name: Class:

Multiply three or more fractions and whole numbers

Multiply the following and simplify the product to either its lowest terms, mixed number or whole number.

Example :

$$6 \times \frac{1}{12} \times \frac{3}{15} = \frac{6}{1} \times \frac{1}{12} \times \frac{3}{15} = \frac{6 \times 1 \times 3}{1 \times 12 \times 15} = \frac{\cancel{18}^1}{\cancel{180}^{10}} = \frac{1}{10}$$

 Therefore, $6 \times \frac{3}{15} \times \frac{3}{15} = \frac{1}{10}$

a. $\frac{4}{5} \times \frac{7}{10} \times \frac{1}{12} =$

b. $10 \times \frac{1}{3} \times \frac{1}{2} \times \frac{1}{4} =$

c. $2 \times \frac{5}{9} \times \frac{3}{4} \times \frac{1}{10} =$

d. $5 \times \frac{5}{10} \times 9 =$

e. $8 \times \frac{11}{10} \times \frac{1}{2} =$

f. $\frac{4}{12} \times \frac{3}{8} \times \frac{2}{5} \times \frac{1}{7} =$

g. $7 \times \frac{5}{8} \times 6 =$

h. $\frac{1}{4} \times \frac{7}{8} \times \frac{2}{5} \times 4 =$

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$$\text{a. } \frac{4}{5} \times \frac{7}{10} \times \frac{1}{12} = \frac{4 \times 7 \times 1}{5 \times 10 \times 12} = \frac{\cancel{28}^7}{\cancel{600}^{150}} = \frac{7}{150}$$

$$\text{b. } 10 \times \frac{1}{3} \times \frac{1}{2} \times \frac{1}{4} = \frac{10 \times 1 \times 1 \times 1}{3 \times 2 \times 4} = \frac{\cancel{10}^5}{\cancel{24}^{12}} = \frac{5}{12}$$

$$\text{c. } 2 \times \frac{5}{9} \times \frac{3}{4} \times \frac{1}{10} = \frac{2 \times 5 \times 3 \times 1}{9 \times 4 \times 10} = \frac{\cancel{30}^1}{\cancel{360}^{12}} = \frac{1}{12}$$

$$\text{d. } 5 \times \frac{5}{10} \times 9 = \frac{5 \times 5 \times 9}{10} = \frac{\cancel{225}^{45}}{\cancel{10}^2} = \frac{45}{2} = 22 \frac{1}{2}$$

$$\text{e. } 8 \times \frac{11}{10} \times \frac{1}{2} = \frac{8 \times 11 \times 1}{10 \times 2} = \frac{\cancel{88}^{22}}{\cancel{20}^5} = \frac{22}{5} = 4 \frac{2}{5}$$

$$\text{f. } \frac{4}{12} \times \frac{3}{8} \times \frac{2}{5} \times \frac{1}{7} = \frac{4 \times 3 \times 2 \times 1}{12 \times 8 \times 5 \times 7} = \frac{\cancel{24}^1}{\cancel{3,360}^{140}} = \frac{1}{140}$$

$$\text{g. } 7 \times \frac{5}{8} \times 6 = \frac{7 \times 5 \times 6}{8} = \frac{\cancel{210}^{105}}{\cancel{8}^4} = \frac{105}{4} = 26 \frac{1}{4}$$

$$\text{h. } \frac{1}{4} \times \frac{7}{8} \times \frac{2}{5} \times 4 = \frac{1 \times 7 \times 2 \times 4}{4 \times 8 \times 5} = \frac{\cancel{56}^7}{\cancel{100}^{20}} = \frac{7}{20}$$